

**Claims:****1. Drinking jar system for animals, said system having**

- (i) a level controlling drinks dispensing portion (2;4,12,13,6), designed to receive a beverage can (1) inserted with a front end portion (1f,1b) downwards, said beverage can containing as a beverage (1a) one of an animal refreshment, a health drink and a nutrition drink;
- (ii) a drinking portion (3;3a,3b) comprising an open top (3a) to allow an animal to access the beverage when dispensed from said dispensing portion (2) into said drinking portion (3) through a beverage communicating passageway (7,7a), preferably a channel (7), between the dispensing and the drinking portion (2,3).

2. System according to claim 1, wherein the dispensing portion (2) has a receiving portion (4) adapted to receive a cylindrical beverage can (1) with no more than the front end portion (1f,1b) thereof, preferably no more than 50%, especially 30% of an axial height of the beverage can.

3. System according to claim 1, wherein the dispensing portion has substantially cylindrical shape, open to the top, at least one bottom support (12,13) and having an opening device (8;8b,8c,8e;8\*) with a blade, suitable for cutting through only a part of a lid (1b) the can front end portion (1f,1b).

4. System of claim 1, wherein the dispensing portion (2) has an upwards directed, preferably at least partly circular, cutting device (8) for cutting through a part of a lid, a support portion (6e) housing a base (8e) of said cutting device, and a receiving buffer chamber (6) for a dispensed amount of the beverage.

5. System according to claim 4, wherein the communicating passageway (7,7a) is provided from said receiving buffer chamber (6) to said drinking portion (3).

6. System according to claim 1 or 4, wherein the dispensing portion has a substantially cylindrical shape (4) adapted in diameter with respect to a cylindrical beverage can, to leave a gap (11,7a) for supplying air near to a bottom of the dispensing portion (4), preferably into the receiving buffer chamber (6).

7. System according to claim 1 or 6, wherein the dispensing portion has a substantially cylindrical shape (4) adapted in diameter with respect to a cylindrical beverage can, to leave an at least partly circumferential gap (11) between the cylindrically shaped inner wall of the dispensing portion (4) and a wall (1e) of the beverage can, when inserted into the dispensing portion.
8. System according to claim 1 or 6, wherein the dispensing portion has a substantially cylindrical shape (4) adapted in diameter with respect to a cylindrical beverage can, and a trench (7a) is provided as the passageway or gap (11) between the dispensing portion (4) and the drinking portion (3;3a,3b) comprising the open top (3a), to supply beverage flowing in one direction and air streaming in the opposite direction.
9. System according to claim 1 or 2 or 6, wherein said dispensing portion has at least one lateral holding portion (4,4a,4b), preferably facing radially inward, for laterally supporting and keeping the adjusted position of the beverage can after having been inserted into the receiving portion (4) of the dispensing portion (2).
10. System according to claim 3, wherein said support (12,13) comprises a support ring (12a,12b) or several circumferentially spaced protruding studs (13;13a,13b,13c).
11. System according to claim 1, having an at least partly circular cutting device (8;8\*) with two portions, for cutting through a relatively small part (1b') of the lid, the device comprising
- (a) a blade part (8c) extending inclined from a top portion (8b) of the cutting device;
  - (b) a non-cutting remaining portion (8d) below the blade part and having a relatively blunt upper end, for pushing the lid part upwards and bending it into the inside of the can, during a part of a downward movement of the can, until resting on a support (12,13).
12. System of claim 1, wherein said dispensing portion (2;4,6,12,13) has a bottom wall (6b) and an opening device (8) protruding therefrom in an upward direction.
13. System according to claim 12, wherein said opening device (8) comprises an at least partly curved blade (8c), said blade extending inclined from a tip portion (8b) downward.

14. System according to claim 13, wherein the angle of inclination ( $\alpha$ ) of the inclined blade changes from a small angle to a large angle, the angle being referred to an axis (100) of said at least partly tubular opening device (8).
- 5 15. System according to claim 14, wherein said large angle of inclination is in the range of 60° to 80°.
16. System according to claim 14, wherein said small angle ( $\alpha$ ) is in the range of 10° to 30°.
- 10 17. System according to claim 14, wherein the change of angle of inclination of said blade (8b,8c) is substantially smooth.
18. System according to claim 13, wherein a lower portion (8d) is terminating the  
15 blade and clearing a cutting portion (8c) from a tearing portion (8d) of said opening device (8).
19. System according to claim 11, wherein said opening device (8,8\*) is shaped and adapted to open the small part (1b') having 20% to 3%, preferably around  
20 substantially 5%, of the area surrounded by a vertical wall segment (4) of the dispensing portion, for receiving the front end portion (1f,1b) of the beverage can (1).
20. System according to claim 13, wherein said opening device comprises no more  
25 than a partly circumferential blade as top cutting edge of a substantially tubular shaft of the device (8).
21. System according to claim 12 or 3, wherein said bottom support (12,13) has upper  
30 stop edges or upper surfaces provided at a first level (L) higher than a second level (L0) of a bottom wall (3a) of said drinking portion (3).
22. System according to claim 3 or 12, wherein said opening device has at least one  
35 lateral window (8a) below the blade portion (8c) for supplying fluid emerging from a partly opened lid to a plenum (6) below an upper end level of the bottom support (12,13).

23. System according to the preceding claim, wherein said lateral window (8a) extends above and below the upper end level of said bottom support (12,13) to supply fluid to a space (6) provided as the plenum between the can lid (1b) - when inserted - and the bottom wall (6b) of the dispensing portion.
24. System according to claim 22, wherein the plenum (6) continues through the passageway (7,7\*) for supplying the fluid emerging from a partly opened lid to said drinking portion (3) at a level lower than the upper end level of said support (12,13) for a seam (10) of the inserted can.
25. System according to claim 12, wherein said dispensing portion further has a plenum (6) near the bottom end wall (6b) for receiving fluid emerging from a partly opened can lid (1b).
26. System according to claim 25, wherein said bottom wall (6b) is sloped towards the passageway (7,7\*) between said dispensing and drinking portions (2,3).
27. System according to claim 1, having a detachable hood (5), surrounding and covering in a closed position both, the dispensing portion and the drinking portion.
28. System according to claim 27, wherein said hood has a handle (5a).
29. System according to claim 3, 4, 11 or 12, wherein said opening device (8,8\*) is made at least in part of metal or ceramics.
30. System of claim 10 or 29, wherein said opening device (8,8\*) being at least in part tapered ( $\phi$ ) or having a slanted wall, slanted towards an axis (100) of said opening device, to have a larger diameter at a base (8e) than at a top (8b) thereof, preferably having a taper angle of between 3° to 10° against the axis.
31. System of claim 30, the device (8,8\*) having a substantially vertically oriented slit (8g), narrowing or tapering towards the top (8b).
32. System of claim 31, the tapering slit (8g) having a maximum width of between 3 mm and 5 mm.

33. System according to claim 1, wherein the two portions (3,2) of the system are made at least in part of painted steel, stainless steel, aluminium or plastics.

34. System according to claims 1 or 5, the communication passageway being shaped as a trench (7a), open to the top and having a closed bottom path.

35. System according to claims 1, 6 or 34, having an air supply (7a,11), adapted for conducting air into the dispensing portion and into an inserted, opened can (1,1b') in one state of the jar system, and for stopping air supply in a second state of the jar system.

36. **Beverage can** for use with a drinking jar system according to claim 1, said can comprising

- (a) a one-piece can body having a domed bottom (1c) and an integrally formed cylindrical side wall (1e) surrounding an inside, said bottom having a thickness greater than said wall;
- (b) a lid having panel portion (1b), attached through a seam (10) to said integral wall, wherein said panel portion is closed and has no score lines adapted for breaking a portion or segment of the lid into the inside of the can body and/or wherein no opening device is attached to the panel portion.

37. Beverage can according to claim 36, wherein said lid and said panel portion constitute a shell without an attached opening system.

38. Beverage can according to claim 36, wherein said lid is made from sheet metal in a thickness between 0.10mm to 0.28mm.

39. Beverage can according to claim 36 or 38, wherein said metal is steel or aluminium.

40. Beverage can according to claim 36, wherein the one piece can body comprises, preferably upside down, an outside decoration identifying use for animals, or at least one animal picture.

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41. **Drinking jar system** for animals, said system having a beverage dispensing portion (2;4,6),

having received

or

designed to accept

a beverage can (1) with an axial portion (1f) – having an end (1b) - downwards, said system further having a drinking portion (3) comprising an open top (3a), allowing the animal to access a beverage when dispensed from said dispensing portion (2) through a passageway (7,7\*) between the dispensing and the drinking portion (2,3) into said drinking portion.

42. **Self-contained unit** for supplementing into or complementing a known or commonly used animal drinking jar, the unit comprising

(i) a dispensing portion (2) having a wall portion (4) for receiving at least an axial part of a beverage can, said wall portion having substantially cylindrical shape;

(2i) a lateral opening (7,7b), preferably a gap, for connecting said dispensing portion to a drinking portion of said drinking jar;

(3i) an attachment device (13,14,15) for attaching said unit to the bottom of said drinking portion of said drinking jar.

43. Unit according to claim 42, wherein the attachment device has at least one suction pad (15,15a), for attaching it to the drinking jar.

44. Unit according to claim 42, wherein said dispensing portion has a level control means (13,9,10) for blocking further flow of beverage from an inverted can, when a certain level (L) in said drinking portion is reached, and for releasing further discharge from said beverage can, when a level of beverage is below said certain level.

45. Unit of claim 44, wherein an upper end of a support means (13) of said level control means is located above or higher than a bottom wall (6b) of said dispensing portion (2;4).

46. Unit of claim 42, wherein said dispensing portion (2;4) has a bottom wall (6b) and an opening device (8) protruding therefrom in an upward direction.

47. Unit according to claim 46, wherein an at least partly circular cutting device (8;8\*) as opening device for cutting through a relatively small part (1b') of the lid has two portions

(a) a blade part (8c) extending inclined from a top portion (8b) of the cutting device;

(b) a non-cutting remaining portion (8d) below the blade part and having a relatively blunt upper end, for pushing the lid part upwards and into the inside of the can, during a downward movement portion of the can, prior to resting on the support (12).

48. Unit of claim 42, the opening (7b) having a height and a width, the height being larger than the width, preferably as a trench in the wall portion, the trench extending downwards to the bottom wall (6b) of the dispensing portion (2,4).

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